

BUMED Oral History Project
Commander Guillermo Pimentel, Ph.D., MSC, USN
Deputy Director, Biological Defense Research Directorate
Naval Medical Research Center, Fort Detrick, MD
Synopsis and Glossary

Date and Location of Interview: 14 November 2014, Naval Medical Research Center, Fort Detrick, Maryland.

Interviewer: Mr. André B. Sobocinski, Historian, BUMED

Synopsis

Commander Pimentel was born in 1970 in Manhattan, New York, and grew up in Guanica, Puerto Rico. His father served in the Merchant Marine, his mother was an Air Force nurse, and he had uncles and cousins who served in the Army and Navy. Pimentel was strongly encouraged by his father to pursue his education, and motivated by the GI bill and the examples of his immediate family, he enlisted in the Navy in 1988. He completed boot camp and Hospital Corps School in San Diego, and served in the Reserves for eight years in Puerto Rico (including a deployment in 1991 to Saudi Arabia during Operation Desert Storm). During that period he completed a B.S. magna cum laude in industrial microbiology, and an M.S. in microbiology from the University of Puerto Rico-Mayagüez. In 1995 he married Leida Rivera-Llorens, and they relocated to Pullman, Washington where he completed a Ph.D. in plant pathology (with a mycology major) from Washington State University in 1999. He and Leida have three sons. Pimentel obtained a commission in the Medical Service Corps on 27 July 1999. He would serve as Assistant Division Officer, Microbiology Department, Naval Medical Center, Portsmouth, VA (1999-2001); Head, Microbiology Department, Naval Medical Center, Portsmouth, VA (2001-2003); Deputy Head, Disease Surveillance Program, Naval Medical Research Unit Three, Cairo, Egypt (2003-2008); Deputy Director, International Emerging Infections Program, NAMRU-3, Cairo (2008-2009); Deputy Head, Virology & Zoonotic Diseases Research Program, Biological Defense Research Directorate, (BDRD), Naval Medical Research Center (NMRC), Silver Spring, MD (2009-2010); Program Manager, International Field Microbiology Program, BDRD, NMRC-Frederick, MD; Deputy Director, BRD, NMRC-Frederick (2011-Present). In wake of the Ebola outbreak in Western Africa (2013-2014),

Pimentel and HMC Jerrold Diederich travelled to Liberia in September 2014 to set up two mobile Ebola laboratories.

KEY ACRONYMS:

AFRICOM—United States Africa Command (AFRICOM)
AML—Advanced Medical Laboratories (Army)
BDRD—Biological Defense Research Directorate, Fort Detrick, MD
BSL—Bio Safety Level
CG—Commanding General
DART—Disaster Assistance Response Team
DoD-GEIS—Department of Defense Global Emerging Infections Surveillance
DTRA-CBEP—Defense Threat Reduction Agency -Cooperative Biological Engagement Program (CBEP).
EPMU—Environmental and Preventive Medicine Units (EPMUs)
ETU—Ebola Treatment Unit
JFC—Joint Forces Command
LHF—Lassa hemorrhagic fever
MSF—Doctors Without Borders/Médecins Sans Frontières
NMRC—Naval Medical Research Center, Silver Spring, MD
OCONUS—Outside the continental United States
PCR—Polymerase chain reaction
PPE—Personal protective equipment
RFF—Request for Forces
RNA—Ribonucleic acid
USAMRIID—U.S. Army Medical Research Institute of Infectious Diseases
WHO—World Health Organization

KEY FIGURES:

Brett-Major, David, M.D., CDR, MC, USN—CDR Brett-Major served with the Global Capacities Alert and Response department of the World Health Organization (WHO), a team of experts that successfully treated and discharged the first Nigerian Ebola Virus disease (EVD) in August 2014.
Calloway, Margaret, M.D., CAPT, MC, USN—Infectious Disease Consultant at NMRC. Performed daily check-ups on CDR Pimentel upon his return from Liberia.
Diederich, Jerrold, HMC—Advanced laboratory technician, Command

Chief, NMRC, Silver Spring, MD. Diederich made site visit to Liberia with CDR Pimentel.

Lawler, James, CDR, MC, USN - Infectious disease physician at NMRC. One of only two DoD physician who has treated Ebola patients.

Mahoney, Frank, CAPT, U.S. Public Health Service. Mahoney is the author of numerous scientific publications and book chapters and is a member of the Infectious Disease Society of America, American Society of Tropical Medicine and Hygiene, and the John Snow Society. He is an adjunct faculty member at the Rollins School of Public Health, Emory University. He served at NAMRU-3 in Cairo, Egypt from 1998-2003.

Malac, Deborah R., U.S. Ambassador to Liberia. Malac has served in Liberia since been 2012.

Porter, Kevin R., M.D., CAPT, MC, USN, Ret. At time of retirement in 2012 was Director, Infectious Diseases Directorate, NMRC, and in 2013 in the same position as a civilian.

Rodriguez, David M., General, USA - Commander, United States Africa Command (AFRICOM).

Sanders, John W. III, M.D., CAPT, MC, USN: Commanding Officer, NMRC, September 2012-present

Williams, Darryl, Major General, USA-Commander U.S. Army in Africa.

GLOSSARY:

Assay-laboratory test or examination

Biosafety Level-Four (BSF-4)-This level is required for work with dangerous and exotic agents that pose a high individual risk of aerosol-transmitted laboratory infections, agents which cause severe to fatal disease in humans for which vaccines or other treatments are *not* available, such as Ebola, Lassa Virus, and other hemorrhagic diseases. (source: "BioLab FAQs"; <http://www.bphc.org/whatwedo/healthy-homes-environment/biological-safety>).

CDC-Centers for Disease Control, Atlanta, GA

CENTCOM-U. S. Central Command, headquartered in Tampa, FL.

DTRA-Defense Threat Reduction Agency, headquartered at Fort Belvoir, VA: the official Combat Support Agency for

Countering weapons of mass destruction (chemical, biological, radiological, nuclear and high explosives)

Ebola—Acute infectious virus first reported in 1976 in the Democratic Republic of Congo near the Ebola River.

Ebola Laboratories, Navy Mobile—The Navy set up two mobile laboratories in Liberia. The first mobile laboratory was established in the Island Clinic (Bushrod Island) near ETU in Western Liberia and placed in operation on October 2, 2014. The Navy activated the second mobile Ebola lab on October 3, 2014 at Cuttington University, Suakoko, Bong County, in Eastern Liberia (120 miles northeast of Monrovia). These laboratories were operational within two weeks of the Navy first receiving a request for forces.

Ebola Outbreak in Western Africa (2013-2014)— Ebola outbreak in West Africa began in December 2013. At the time of this interview it is estimated that 6,113 individuals in Liberia, Guinea and Sierra Leone have died of Ebola (source: "Ebola Outbreak." www.cdc.gov)

Foya, Liberia—District in Lofa County (Northern Liberia).

GEIS: Global Emerging Infections Surveillance (DOD-GEIS): a DOD influenza surveillance network established in 1997 with the Air Force as executive agent.

Glove box or glovebox—A sealed container that is designed to allow one to manipulate objects where a separate atmosphere is desired.

H1N1—swine flu pandemic outbreak in 2009 with estimates as high as 579,000 deaths worldwide.

ISO Containers—Standardized reusable steel box used to store and move materials through intermodal freight transport system (airplane, ship, train, etc).

Lassa hemorrhagic fever (LHF)—an acute viral hemorrhagic fever caused by the Lassa virus and first described in 1969 in the town of Lassa, Nigeria.

NBC Cameraman Ebola Case—In September 2014, freelance photojournalist Ashoka Mukpo working for NBC News in Liberia contracted Ebola.

New York Ebola Case—On October 23, 2014, American doctor Craig Spencer was rushed to Bellevue Hospital in New York after symptoms of Ebola manifested. He was the first case of Ebola in New York City. His case helped spark the debate of quarantining medical personnel returning from Liberia.

Operation United Assistance—DoD's overarching support in wake of the Ebola outbreak in West Africa.

Pelican containers—High performance, watertight, and almost indestructible cases manufactured by the Pelican Company.

Polymerase chain reaction (PCR)—A technique for amplifying DNA Sequences.

Personal protective equipment (PPE)—PPE is equipment worn to minimize exposure to serious workplace injuries and illnesses. These injuries and illnesses may result from contact with chemical, radiological, physical, electrical, mechanical, or other workplace hazards. Personal protective equipment may include items such as gloves, safety glasses and shoes, earplugs or muffs, hard hats, respirators, or coveralls, vests and full body suits. (Source: www.osha.gov).

Quarantine Centers, DoD—After implementing mandatory quarantine for service personnel in Western Africa, the Department of Defense established quarantine centers at Fort Bliss, El Paso, TX, Fort Bragg, Fort Bragg, NC, Fort Hood, Killeen, TX, Joint Base Lewis-McChord, Fort Lewis, WA, Langley Air Force Base, Langley, VA and Army garrisons in Baumholder, Germany and Vincenza, Italy.

Quarantine Procedures, DoD—On October 29, 2014, the Department of Defense implemented a mandatory 21-day quarantine for all returning American service personnel. DoD civilians were given the option of self-monitor, or volunteer quarantine.

United States Africa Command (AFRICOM)—One of six of the U.S. Defense Department's geographic combatant commands and is responsible to the Secretary of Defense for military relations with African nations, the African Union, and African regional security organizations. A full-spectrum combatant command, U.S. AFRICOM is responsible for all U.S. Department of Defense operations, exercises, and security cooperation on the African continent, its island nations, and surrounding waters. AFRICOM began initial operations on Oct. 1, 2007, and officially became an independent command on Oct. 1, 2008. (source: www.africom.mil).